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What is claimed is:

- 1 1. A service providing method of providing a current user of  
2 a first apparatus with each of services that are provided by  
3 a plurality of other apparatuses via a network, the first  
4 apparatus being able to communicate with each of the plurality  
5 of other apparatuses via the network and being locally  
6 connectable to a recording medium, out of recording media that  
7 are uniquely assigned to users of the first apparatus, each  
8 recording medium being transportable and including an area  
9 for storing unique information,  
10 the service providing method comprising:  
11 a service requesting step where the first apparatus  
12 requests a second apparatus to provide a service desired by  
13 the current user, the second apparatus being one of the plurality  
14 of other apparatuses;  
15 a unique information reading step where if a recording  
16 medium of the current user is locally connected to the first  
17 apparatus and stores unique information, the second apparatus  
18 reads the unique information in the locally connected recording  
19 medium via the first apparatus and the network; and  
20 a service providing step where the second apparatus  
21 customizes the desired service according to the read unique  
22 information and transmits the customized service to the first  
23 apparatus.

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1 2. The service providing method of Claim 1,  
2 wherein in the unique information reading step, if  
3 no unique information is stored in the locally connected  
4 recording medium or no recording medium is locally connected  
5 to the first apparatus, the second apparatus does not read  
6 unique information from anywhere, and

7 in the service providing step, if no unique information  
8 has been read in the unique information reading step, the second  
9 apparatus transmits the desired service to the first apparatus  
10 in an uncustimized state.

1 3. The service providing method of Claim 2,  
2 wherein the unique information stored in each recording  
3 medium includes user information that is inherent in a user  
4 assigned the recording medium, and

5 in the service providing step, the second apparatus  
6 customizes the desired service for the current user according  
7 to the user information included in the read unique information  
8 and transmits the customized service to the first apparatus.

1 4. The service providing method of Claim 3 further comprising:  
2 a user information updating step, performed after the  
3 unique information reading step, where if the user information  
4 inherent in the current user needs to be updated, the second  
5 apparatus updates the user information included in the read  
6 unique information and overwrites the user information in the



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8 includes cookie information used through the Internet browser,  
9 and  
10 each recording medium stores the cookie information  
11 as a file.

1 7. The service providing method of Claim 2,  
2 wherein the unique information stored in each recording  
3 medium includes a media identifier of the recording medium,  
4 the second apparatus stores user information so that  
5 user information inherent in each user is associated with the  
6 media identifier of the recording medium assigned to the user,  
7 and  
8 the service providing step includes:  
9 a user information finding substep where the second  
10 apparatus finds user information associated with the media  
11 identifier included in the read unique information; and  
12 a customizing substep where the second apparatus  
13 customizes the desired service for the current user according  
14 to the found user information.

1 8. The service providing method of Claim 1 further comprising:  
2 a recording medium connection step, performed before  
3 the service requesting step, where the first apparatus is locally  
4 connected to the recording medium assigned to the current user.

1 9. The service providing method of Claim 8,

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2           wherein the unique information stored in each recording  
3 medium includes a media identifier of the recording medium  
4 and user information that is inherent in a user assigned the  
5 recording medium, the user information having been encrypted,  
6 and

7           the service providing step includes:

8           a user password receiving substep where the second  
9 apparatus receives a user password from the current user via  
10 the first apparatus;

11          a decryption key generating substep where the second  
12 apparatus generates a decryption key from the media identifier  
13 included in the read unique information and the received user  
14 password;

15          a decryption substep where the second apparatus decrypts  
16 the encrypted user information included in the read unique  
17 information using the generated decryption key; and

18          a customizing substep where the second apparatus  
19 customizes the desired service for the current user according  
20 to the decrypted user information.

1   10. The service providing method of Claim 9,

2           wherein each recording medium includes a secure data  
3 area,

4           the media identifier of each recording medium is stored  
5 in the secure data area of the recording medium, and

6           the unique information reading step includes:

7           a device authentication substep where a device  
8 authentication is performed between the first apparatus and  
9 the locally connected recording medium; and

10           a reading prohibition substep where, if the device  
11 authentication has ended in failure, the second apparatus is  
12 prohibited to read data from the secure data area of the locally  
13 connected recording medium.

11. A service providing method used by a first apparatus that  
2 receives each of services that are provided by a plurality  
3 of other apparatuses via a network and provides the received  
4 service to a current user of the first apparatus, the first  
5 apparatus being able to communicate with each of the plurality  
6 of other apparatuses via the network and being locally  
7 connectable to a recording medium, out of recording media that  
8 are uniquely assigned to users of the first apparatus, each  
9 recording medium being transportable and including an area  
10 for storing unique information,

11           the service providing method comprising:

12           a service requesting step where the first apparatus  
13 requests a second apparatus to provide a service desired by  
14 the current user, the second apparatus being one of the plurality  
15 of other apparatuses;

16           a unique information transmitting step where if a  
17 recording medium of the current user is locally connected to  
18 the first apparatus and stores unique information, the first

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19 apparatus reads the unique information in the locally connected  
20 recording medium and transmits the read unique information  
21 to the second apparatus via the network; and  
22 a service providing step where the first apparatus  
23 receives a customized service from the second apparatus and  
24 provides the received service to the current user, wherein  
25 the customized service is generated at the second apparatus  
26 by customizing the desired service according to the transmitted  
27 unique information.

1 12. The service providing method of Claim 11,  
2 wherein in the unique information transmitting step,  
3 if no unique information is stored in the locally connected  
4 recording medium or no recording medium is locally connected  
5 to the first apparatus, the first apparatus does not read unique  
6 information from anywhere, and  
7 in the service providing step, if having transmitted  
8 no unique information in the unique information transmitting  
9 step, the first apparatus receives the desired service from  
10 the second apparatus in an uncustomized state and provides  
11 the received service to the current user.

1 13. The service providing method of Claim 12,  
2 wherein the unique information stored in each recording  
3 medium includes user information that is inherent in a user  
4 assigned the recording medium, and

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5 the customized service that is received and provided  
6 in the service providing step is generated at the second apparatus  
7 by customizing the desired service for the current user according  
8 to the user information included in the transmitted unique  
9 information.

1 14. The service providing method of Claim 13 further comprising:  
2 a user information updating step, performed after the  
3 unique information transmitting step, where if the user  
4 information inherent in the current user needs to be updated,  
5 the first apparatus receives updated user information from  
6 the second apparatus and overwrites the user information in  
7 the locally connected recording medium with the updated user  
8 information.

1 15. The service providing method of Claim 14,  
2 wherein the user information in each recording medium  
3 has been encrypted using a public key of a public key  
4 cryptosystem,  
5 the second apparatus stores a secret key corresponding  
6 to the public key,  
7 the customized service that is received and provided  
8 in the service providing step is generated at the second apparatus  
9 by decrypting the encrypted user information included in the  
10 transmitted unique information using the secret key and  
11 customizing the desired service according to the decrypted



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12 user information, and  
13 the updated user information received from the second  
14 apparatus in the user information updating step is generated  
15 at the second apparatus by updating the decrypted user  
16 information and encrypting the updated user information using  
17 the public key.

1 16. The service providing method of Claim 15,  
2 wherein the network is the Internet,  
3 the first apparatus is an Internet terminal that runs  
4 a specialized Internet browser,  
5 each of the plurality of other apparatuses is a Web  
6 site,  
7 the unique information stored in each recording medium  
8 includes cookie information used through the Internet browser,  
9 and  
10 each recording medium stores the cookie information  
11 as a file.

1 17. The service providing method of Claim 12,  
2 wherein the unique information stored in each recording  
3 medium includes a media identifier of the recording medium,  
4 the second apparatus stores user information so that  
5 user information inherent in each user is associated with the  
6 media identifier of the recording medium assigned to the user,  
7 and

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8 the customized service that is received and provided  
9 in the service providing step is generated at the second apparatus  
10 by finding user information associated with the media identifier  
11 included in the transmitted unique information and customizing  
12 the desired service for the current user according to the found  
13 user information.

1 18. The service providing method of Claim 11 further comprising:

2 a recording medium connection step, performed before  
3 the service requesting step, where the first apparatus is locally  
4 connected to the recording medium assigned to the current user.

1 19. The service providing method of Claim 18,

2 wherein the unique information stored in each recording  
3 medium includes a media identifier of the recording medium  
4 and user information that is inherent in a user assigned the  
5 recording medium, the user information having been encrypted,  
6 and

7 the service providing step includes:

8 a user password receiving substep where a user password  
9 is received from the current user,

10 wherein the customized service that is received and  
11 provided in the service providing step is generated at the  
12 second apparatus by generating a decryption key from the media  
13 identifier included in the transmitted unique information and  
14 the received user password, decrypting the encrypted user

15 information included in the transmitted unique information  
16 using the generated decryption key, and customizing the desired  
17 service for the current user according to the decrypted user  
18 information.

1 20. The service providing method of Claim 19,  
2 wherein each recording medium includes a secure data  
3 area,  
4 the media identifier of each recording medium is stored  
5 in the secure data area of the recording medium, and  
6 the unique information transmitting step includes:  
7 a device authentication substep where a device  
8 authentication is performed between the first apparatus and  
9 the locally connected recording medium; and  
10 a transmitting prohibition substep where, if the device  
11 authentication has ended in failure, the first apparatus is  
12 prohibited to transmit data in the secure data area of the  
13 locally connected recording medium.

1 21. A service providing apparatus that receives each of services  
2 that are provided by a plurality of other apparatuses via a  
3 network and provides the received service to a current user  
4 of the service providing apparatus, the service providing  
5 apparatus being able to communicate with each of the plurality  
6 of other apparatuses via the network and being locally  
7 connectable to a recording medium, out of recording media that

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8 are uniquely assigned to users of the service providing apparatus,  
9 each recording medium being transportable and including an  
10 area for storing unique information

11 the service providing apparatus comprising:

12 a service requesting unit operable to request a specific  
13 apparatus, out of the plurality of other apparatuses, to provide  
14 a service desired by the current user;

15 a unique information transmitting unit operable to  
16 read, if a recording medium of the current user is locally  
17 connected to the service providing apparatus and stores unique  
18 information, the unique information in the locally connected  
19 recording medium and transmit the read unique information to  
20 the specific apparatus via the network; and

21 a service providing unit operable to receive a customized  
22 service from the specific apparatus and provide the received  
23 service to the current user, wherein the customized service  
24 is generated at the specific apparatus by customizing the desired  
25 service according to the transmitted unique information.

1 22. The service providing apparatus of Claim 21,

2 wherein if no unique information is stored in the locally  
3 connected recording medium or no recording medium is locally  
4 connected to the service providing apparatus, the unique  
5 information transmitting unit does not read unique information  
6 from anywhere, and

7 if the unique information transmitting unit has

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8 transmitted no unique information, the service providing unit  
9 receives the desired service from the specific apparatus in  
10 an uncustomized state and provides the received service to  
11 the current user.

1 23. The service providing apparatus of Claim 22,  
2 wherein the unique information stored in each recording  
3 medium includes user information that is inherent in a user  
4 assigned the recording medium, and  
5 the customized service that is received and provided  
6 by the service providing unit is generated at the specific  
7 apparatus by customizing the desired service for the current  
8 user according to the user information included in the  
9 transmitted unique information.

1 24. The service providing apparatus of Claim 23 further  
2 comprising:  
3 a user information updating unit operable to receive,  
4 if the user information inherent in the current user needs  
5 to be updated, updated user information from the specific  
6 apparatus and overwrite the user information in the locally  
7 connected recording medium with the updated user information.

1 25. The service providing apparatus of Claim 24,  
2 wherein the user information in each recording medium  
3 has been encrypted using a public key of a public key

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4 cryptosystem,  
5 the specific apparatus stores a secret key corresponding  
6 to the public key,  
7 the customized service that is received and provided  
8 by the service providing unit is generated at the specific  
9 apparatus by decrypting the encrypted user information included  
10 in the transmitted unique information using the secret key  
11 and customizing the desired service according to the decrypted  
12 user information, and  
13 the updated user information received from the specific  
14 apparatus by the user information updating unit is generated  
15 at the specific apparatus by updating the decrypted user  
16 information and encrypting the updated user information using  
17 the public key.

1 26. The service providing apparatus of Claim 25,  
2 wherein the network is the Internet,  
3 the service providing apparatus is an Internet terminal  
4 that runs a specialized Internet browser,  
5 each of the plurality of other apparatuses is a Web  
6 site,  
7 the unique information stored in each recording medium  
8 includes cookie information used through the Internet browser,  
9 and  
10 each recording medium stores the cookie information  
11 as a file.

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1 27. The service providing apparatus of Claim 22,  
 2 wherein the unique information stored in each recording  
 3 medium includes a media identifier of the recording medium,  
 4 the specific apparatus stores user information so that  
 5 user information inherent in each user is associated with the  
 6 media identifier of the recording medium assigned to the user,  
 7 and  
 8 the customized service that is received and provided  
 9 by the service providing unit is generated at the specific  
 10 apparatus by finding user information associated with the media  
 11 identifier included in the transmitted unique information and  
 12 customizing the desired service for the current user according  
 13 to the found user information.

1 28. The service providing apparatus of Claim 21 further  
 2 comprising:  
 3 a recording medium connection unit operable to locally  
 4 connect the service providing apparatus to the recording medium  
 5 assigned to the current user.

1 29. The service providing apparatus of Claim 28,  
 2 wherein the unique information stored in each recording  
 3 medium includes a media identifier of the recording medium  
 4 and user information that is inherent in a user assigned the  
 5 recording medium, the user information having been encrypted,

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6 and

7 the service providing unit includes:

8 a user password receiving unit operable to receive  
9 a user password from the current user,

10 wherein the customized service that is received and  
11 provided by the service providing unit is generated at the  
12 specific apparatus by generating a decryption key from the  
13 media identifier included in the transmitted unique information  
14 and the received user password, decrypting the encrypted user  
15 information included in the transmitted unique information  
16 using the generated decryption key, and customizing the desired  
17 service for the current user according to the decrypted user  
18 information.

1 30. The service providing apparatus of Claim 29,

2 wherein each recording medium includes a secure data  
3 area,

4 the media identifier of each recording medium is stored  
5 in the secure data area of the recording medium, and

6 the unique information transmitting unit includes:

7 a device authentication unit operable to perform a  
8 device authentication between the service providing apparatus  
9 and the locally connected recording medium; and

10 a transmitting prohibition unit operable to prohibit,  
11 if the device authentication has ended in failure, transmission  
12 of data in the secure data area of the locally connected recording



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13 medium.

1 31. A recording medium which records a service providing program  
2 that has a first apparatus execute a procedure for receiving  
3 each of services that are provided by a plurality of other  
4 apparatuses via a network and providing the received service  
5 to a current user of the first apparatus, the first apparatus  
6 being able to communicate with each of the plurality of other  
7 apparatuses via the network and being locally connectable to  
8 a recording medium, out of recording media that are uniquely  
9 assigned to users of the first apparatus, each recording medium  
10 being transportable and including an area for storing unique  
11 information,

12 the service providing program comprising:

13 a service requesting step where the first apparatus  
14 requests a second apparatus to provide a service desired by  
15 the current user, the second apparatus being one of the plurality  
16 of other apparatuses;

17 a unique information transmitting step where if a  
18 recording medium of the current user is locally connected to  
19 the first apparatus and stores unique information, the first  
20 apparatus reads the unique information in the locally connected  
21 recording medium and transmits the read unique information  
22 to the second apparatus via the network; and

23 a service providing step where the first apparatus  
24 receives a customized service from the second apparatus and

25 provides the received service to the current user, wherein  
26 the customized service is generated at the second apparatus  
27 by customizing the desired service according to the transmitted  
28 unique information.

1 32. A recording medium that is transportable and locally  
2 connectable to each Internet terminal, which runs a specialized  
3 Internet browser, and stores cookie information used through  
4 the Internet browser,

5 wherein if an Internet terminal is locally connected  
6 to the recording medium, a Web site that is connected to the  
7 Internet terminal via the Internet stores and reads cookie  
8 information into and from the recording medium through the  
9 Internet browser.

1 33. The recording medium of Claim 32,

2 wherein the stored cookie information has been encrypted  
3 using a public key corresponding to a secret key that has been  
4 obtained under a public key cryptosystem and is stored in the  
5 Web site.

1 34. The recording medium of Claim 32 comprising:

2 a secure data area that stores a media identifier of  
3 the recording medium;

4 a device authentication unit operable to perform device  
5 authentication with the locally connected Internet terminal;

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6 and

7 a reading prohibition unit operable to prohibit the  
8 locally connected Internet terminal from reading data in the  
9 secure data area, if the device authentication has ended in  
10 failure.

1 35. The recording medium of Claim 34,

2 wherein the encrypted and stored cookie information  
3 is to be decrypted using a decryption key generated from the  
4 media identifier and a user password designated by a user assigned  
5 the recording medium.